

EHMA 202-

Shaping and managing innovative health ecosystems

Valuation and perception of the costs of climate change on health

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Context

- Climate change affects our societies and lives through our economies, our livelihoods, and our health.
- Economic losses of climate change are estimated at \$23 trillion, largely through externalities due to premature mortality, health-care expenditure, and healthrelated work losses.
- Even if there are established methods to quantify the health economic burden,
 there is limited information on how people perceive this information.



Aim of the study

 Examine different health cost evaluation methods and observe perceptions of stakeholders in the climate change context.

 Examine how to evaluate the health care costs and the external costs of climate change by analyzing different calculation methods and observing its perceptions among experts, policy- and decisionmakers and non-governmental (NGO) sector representatives.



Methods:

The participatory research approach of the World Café with 41 participants of a workshop was applied to explore four topics associated with valuing the costs of climate change:

- "Actual health-care cost or willingness to pay what is better indicator of costs?"
- "How cost-effective are mitigation and adaptation measures?"



Methods:

The participatory research approach of the World Café with 41 participants of a workshop was applied to explore four topics associated with valuing the costs of climate change:

- "How external costs concept could be integrated into policies?"
- "How to make public better understand the costs of climate change?" The data were analyzed following an inductive approach. For analysis of recorded data, we established a matrix that included the questions and responses from the representatives. In content analysis we summarized the identified main themes (ethics, methods, data, communication, holistic approach, political agenda and best practice) and subthemes.



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Results:

- Despite the willingness to pay approach being widely applied, many experts see direct health-care costs as a more explicit indicator of costs; however, this might underestimate the full social costs.
- The participants experienced difficulties accepting and understanding cost estimates indicating very high externalities as percentages of GDP.
- The cost-effectiveness of mitigation and adaptation measures was challenged by the query that costs incurring now, but benefits happening later as it can be with building bike lanes or dams.



Results:

- The policies should favor environmentally friendly activities as making cycling more convenient in the cities with the health benefits in monetary terms while limiting car driving.
- Public could better understand the costs of climate change with a tool mapping how solutions influence different sectors and showing monetarized benefits for health. An is example is the Health Economic Assessment Tool for walking and cycling, developed by World Health Organization, to calculate, the benefits for health and the environment.



Discussion:

- Estimating the price tag of climate change on human health is not critical but challenging.
- The methods, how experts communicate, and present numbers prove to be crucial both for politicians when setting up political agenda and building trust towards public.
- During the World Café discussions, it was suggested that using stories can be more effective when communicating with the public.
- The need for well-presented science and data quality was stressed as a crucial theme by all participants.



Discussion:

- Especially for some experts it was more critical to have any relevant existing data.
- For others it was about having updated data and that packaging data is right so it can be used in decision- and policy making.
- Enhancing health, climate change and external costs literacy among the public, policymakers, and the media is essential for better understanding the comprehensive effects of policies on environmental burdens.



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Thank you

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